

AMENDMENT UNDER 37 C.F.R. § 1.111

U.S. Application No.: 10/772,417

REMARKS

Claims 1-46 are pending in the application. By this Amendment, new claims 35-46 are added.

As a preliminary matter, the drawings are objected to under 37 C.F.R. § 1.83(a) because the Examiner alleges that every feature of the invention specified in the claims is not shown. The Examiner states that horizontal cylindrical lenses comprising a non-spherical face and a flat exit face (claim 3) and vertical cylindrical lenses comprising a non-spherical entrance face (claim 9) are not shown in the drawings.

Applicant respectfully submits that paragraph 38 of the Specification discloses “a light diffusion film 35 compris[ing] a vertical array of hemicylindrical lenses 35a having spherical or non-spherical faces of a predetermined curvature.” Further, Fig. 3 generally shows the diffusion film 35 having a flat face and hemicylindrical lenses 35a with curved surfaces. Given the depiction of the generally curved surfaces of the hemispherical lenses 35a, one skilled in the art would readily recognize that Fig. 3 generally shows a horizontal cylindrical lenses comprising a non-spherical face and a flat exit face as specified in the claims, in addition to showing a spherical face.

Similarly, the depiction of the generally curved surfaces at one side of the lenticular lens sheet 33 in Fig. 3 show vertical cylindrical lenses comprising a non-spherical entrance face. Therefore, the generalized depictions in the drawings show all aspects of the claims and do not require additional illustration.

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Claims 3, 6, 8-10, 19, 22, 24-26 are objected to because the meaning of non-spherical is supposedly unclear. Applicant submits claims 3, 6, 8-10, 19, 22, 24-26 obviating the Examiner's objections.

Claims 1, 5-11, 15-18, 21-27 and 31-34 are rejected under 35 U.S.C. § 102(b) as being anticipated by Takuma et al. (U.S. Patent No. 5,615,045; hereinafter "Takuma"). Claims 1-3, 5-6, 15, 17-19, 21-22, 31 and 33-34 are rejected under 35 U.S.C. § 102(b) as being anticipated by Ogino (U.S. Patent No. Re. 33,795). Claims 4, 12-13, 20 and 28-29 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Takuma in view of Chang et al. (U.S. Patent No. 6,862,139; hereinafter "Chang"). Claims 14 and 30 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Takuma in view of Chang and further in view of Goto (U.S. Patent No. 6,822,792). Claims 4, 12-13, 20 and 28-29 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ogino in view of Chang. Claims 14 and 30 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ogino in view of Chang and further in view of Goto. Applicant adds new claims 35-46 to more particularly claim the invention and submits the following arguments to traverse the prior art rejections.

An embodiment of Applicant's invention relates to screens which increase viewing angles, both the vertical and the horizontal directions. In an embodiment, a screen includes, *inter alia*, a lens comprising a horizontal array of vertical lenses, in which vertical stripes are formed in parallel on connection portions for the vertical lenses and a light diffusion film comprising a vertical array of horizontal lenses, in which horizontal stripes are formed in parallel on

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connection portions for the horizontal lenses. In various embodiments, the light diffusion film could comprise additional structures, such as darkened areas of various shapes on the exit face.

Rejection under 35 U.S.C. § 102(b) by Takuma

Claims 1, 5-11, 15-18, 21-27 and 31-34 are rejected as being anticipated by Takuma.

The cited reference relates to a projection screen that employs a longitudinal-stripe lenticular lens screen 14 superposed on a transverse-stripe lenticular lens 23. Black stripes 22 are formed on the surfaces of the lenticular lens screens 14 and 23 except for the positions of the lenticular lenses.

Applicant submits that claim 1 is patentable because Takuma does not teach each and every element of the claim. For example, claim 1 describes, *inter alia*, the light diffusion film further comprising one or more darkened areas of one or more shapes on an exit face. The Examiner cites the transverse-stripe lenticular lens 23 as teaching of the light diffusion film and black stripe 22 as teaching of the horizontal stripe. Assuming *arguendo*, that the lenticular lens 23 corresponds to the light diffusion film and the black stripe 22 corresponds to the horizontal stripe, nowhere in Takuma is there any teaching of the lenticular lens further comprising one or more darkened areas of one or more shapes on an exit face, as described in claim 1. Therefore, for at least the above reasons, claim 1 is patentable.

Claims 5-11, 15-18, 21-27 and 31-34, which are either dependent upon claim 1 or contain features that are analogous to the features recited in claim 1, are patentable at least for the arguments submitted for claim 1.

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Rejection under 35 U.S.C. § 103(a) by Takuma in view of Chang

Claims 4, 12-13, 20 and 28-29 are rejected as being unpatentable over Takuma in view of Chang.

Claims 4, 12-13, 20 and 28-29, which depend from either claims 1 or 17, are patentable for at least the deficiencies of Takuma submitted for claims 1 and 17, and the failures of Chang to make up for the deficiencies of Takuma.

Rejection under 35 U.S.C. § 103(a) by Takuma, Chang and Goto

Claims 14 and 30 are rejected as being unpatentable over Takuma in view of Chang and further in view of Goto.

Claims 14 and 30, which depend from either claims 1 or 17, are patentable for at least the deficiencies of Takuma submitted for claims 1 and 17, and the failures of Chang and Goto to make up for the deficiencies of Takuma.

Rejection under 35 U.S.C. § 102(b) by Ogino

Claims 1-3, 5-6, 15, 17-19, 21-22, 31 and 33-34 are rejected as being anticipated by Ogino. The cited reference relates to a rear image projection apparatus having a transmissive screen, which contains a Fresnel lens and a lenticular lens similar to those disclosed in Takuma.

Claim 1 is patentable because Ogino fails to teach each and every element of the claim. For example, Ogino's deficiencies are analogous to Takuma in that Ogino does not contain any teaching of a light diffusion film further comprising one or more darkened areas of one or more shapes on an exit face.

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Claims 2-3, 5-6, 15, 17-19, 21-22, 31 and 33-34, which are either dependent upon claim 1 or contain features that are analogous to the features recited in claim 1, are patentable at least for the arguments submitted for claim 1.

Rejection under 35 U.S.C. § 103(a) by Ogino in view of Chang

Claims 4, 12-13, 20 and 28-29 are rejected as being unpatentable over Ogino in view of Chang.

Claims 4, 12-13, 20 and 28-29, which depend from either claims 1 or 17, are patentable for at least the deficiencies of Ogino submitted for claims 1 and 17, and the failures of Chang to make up for the deficiencies of Ogino.

Rejection under 35 U.S.C. § 103(a) by Ogino, Chang and Goto

Claims 14 and 30 are rejected as being unpatentable over Ogino in view of Chang and further in view of Goto.

Claims 14 and 30, which depend from either claims 1 or 17, are patentable for at least the deficiencies of Ogino submitted for claims 1 and 17, and the failures of Chang and Goto to make up for the deficiencies of Ogino.

New claims 35-46 are patentable for at least the reasons submitted for their respective base claims.

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Respectfully submitted,

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